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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/736,548	12/13/2000	Uwe Schumann	BEIERSDORF 685-WCG	5636
7590 02/18/2004			EXAMINER	
Norris McLaughlin & Marcus, P.A. 220 East 42nd Street 30th Floor New York, NY 10017			CHANG, VICTOR S	
			ART UNIT	PAPER NUMBER
			1771	
DATE MAILED: 02/18/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/736,548

Applicant(s)

SCHUMANN ET AL.

Examiner

Victor S Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

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### DETAILED ACTION

1. In view of the Appeal Brief filed on 12/8/2003, PROSECUTION IS HEREBY REOPENED. New grounds of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Rejections not maintained are withdrawn. In particular, upon reconsideration, the Examiner now substantially agrees with Applicants' argument that Kinzer lacks an express teaching of "an epoxy component AND an amine component as part of the crosslinked epoxy resin" in Kinzer's photopolymerizable epoxy composition (Appeal Brief, page 4), Applicants' arguments are moot in view of the following rejection over the previously applied Kinzer reference. Additionally, there are issues under 35 U.S.C. 112, second paragraph, as follows.

***Claim Rejections - 35 USC § 112***

4. Claims 1, 4-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the structural relation between the coating of the epoxy resin and the self-adhesive composition is vague and indefinite. For the purpose of this Office action, it is presumed that the epoxy coating layer and the adhesive layer are on the opposite side of the polyester film, so as to be consistent with the disclosed Examples and also claim 10 of the instant invention. Amendment to clarify the structure is requested.

In claim 1, line 1, the Examiner suggests to rewrite "a self-adhesive composition" as --a layer of self-adhesive--, as the term "composition" appears to be unnecessary and redundant, and also to clarify the structural relation of the claimed element.

In claim 5, line 1, the phrase "the reverse of" is vague and indefinite, because it is unclear as to the structural relations among the layers. The Examiner suggests to rewrite it as --the outer surface of--.

In claim 6, lines 1-2, the Examiner suggests to rewrite the phrase "has the following makeup" as --comprising--.

In addition, please correct any other informalities which may have been overlooked.

***~~Response to Amendment~~***

5. Claims 1, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinzer et al. (5667893) in view of Kolb (US 3391053).

Kinzer's invention relates to a flexible electrical insulating adhesive tape (Abstract and column 2, line 52). Kinzer teaches that the use of epoxy resins in tape backings is known in the art (column 1, lines 40-41). Kinzer also teaches that the epoxy monomers of prior art backing must be processed by adding a curing agent (column 2, lines 9-13), and polyfunctional amines are known thermal curing agents for epoxy resins (column 1, lines 23-25).

For claims 1 and 4, Kinzer lacks teachings of the specific structures of epoxy resins and amine curing agents, and the polyester film substrate for forming the prior art electrical insulating tape backings. However, it is noted that Kolb's invention is directed to a flexible epoxy coated laminate as an insulating tape (column 1, lines 22-26 and Fig. 1). Kolb also teaches that epoxy resins of sufficient flexibility for forming insulating tapes is well known in the art. The epoxy resin employed does not have to be inherently flexible. Modifiers (i.e., plasticizers) can be added to non-flexible epoxy resins to render them sufficiently flexible (column 2, lines 65-70). Flexible curing agents include the polyamides and amines (column 3, lines 1-2). In Example I, Kolb shows a coating of a mixture of an epoxy based on bisphenol A and a curing agent based on diethylene amine, and the coating is thermally cured at 200°C (column 3, lines 50-68). As to the suitable tape substrate and adhesives, in one embodiment, Kinzer expressly teaches an electrical adhesive tape which comprises a fully cured epoxy composition on

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a polyester substrate and an adhesive (column 2, lines 32-58; Example 1), and useful adhesives include, but are not limited to, rubber resin adhesives, synthetic block copolymers such as styrene-butadiene-styrene, polybutadiene, polyisoprene, styrene-isoprene copolymers, acrylate adhesives, etc. (column 6, lines 52-65), which clearly encompass self-adhesives. As such, it would have been obvious to one of ordinary skill in the art to form the prior art tape backings by the teachings of Kinzer and Kolb, i.e., combining Kinzer's polyester film substrate and adhesives with Kolb's thermally cured epoxy/amine materials and modifiers, motivated by the desire to obtain a flexible electrical adhesive tape.

Regarding the product-by-process recitation in claim 1, lines 3-4, "prepared by ... solvent-free epoxy resins", the Examiner notes that the method limitations have not been shown on the record to produce a patentably distinct article, as such the formed articles are rendered *prima facie* obvious. See MPEP § 2113.

For claim 5, Kinzer lacks an express teaching of a release coating on the outer surface of the epoxy coating. However, it is conventional that a release coating is applied on the outer surface of a tape backing, as evidenced by Caimi et al. (US 3933702) which teaches that in the case of a pressure sensitive tapes, a release coating is applied to the side opposite that to which the adhesive layer is fixed is known art (column 1, lines 16-21), motivated by the desire to provide required releasing property between adhesive tapes, such as unwinding a roll of adhesive tape for use.

6. Claims 6, 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinzer et al. (5667893) in view of Wiest et al. (US 4322516).

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The teachings of Kinzer are again relied upon as set forth above.

For claims 6, 7 and 11, Kinzer lacks teachings of the specific adhesive compositions and the thickness of the adhesive layer. However, it is noted that Wiest's patent is directed to an acrylic copolymer for use as a pressure-sensitive adhesive (Abstract), and the scope of Wiest's monomer ratios in the adhesive compositions (column 1, lines 35-65) clearly reads on the adhesive compositions of the instantly claimed invention. Further, Wiest also shows in Example 1 that the thickness of an adhesive coating is 25  $\mu$ . As such, in the absence of unexpected results, it would have been obvious to one of ordinary skill in the art to modify Kinzer's epoxy coated polyester tape backing with a suitable amount (or thickness) of Wiest's adhesive, motivated by the desire to obtain a pressure sensitive adhesive tape with improved electrical properties and adequate amount of adhesiveness. It should be noted that the selection of a known material based on its suitability for its intended use supported a *prima facie* obviousness determination. See MPEP § 2144.07.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kneisel (US 5741383).

Kneisel's invention is directed to a process for bonding a vehicle window (Abstract). Kneisel teaches that it is known art to bond vehicle windows by first masking the flange before the vehicle is painted by the application of a solid pressure sensitive adhesive tape (column 1, lines 40-43). Regarding the recitation of "tape of claim 1" at line 1 of claim 8, the Examiner notes that it has been held that to be entitled to weight in method claims, the recited structure limitations therein must affect the method in a

manipulative sense, and not to amount to the mere claiming of a use of a particular structure. *Ex parte Pfeiffer*, 1962 C.D. 408 (1961).

8. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinzer et al. (5667893).

For process claim 9, a fully cured (or crosslinked) epoxy inherently lacks flow property, and Kinzer expressly teaches that the epoxy monomers of prior art tape backing must be processed by adding a curing agent to develop any shelf stability (column ,2, lines 9-13). In the absence of evidence to the contrary, it is believed that applying a mixture of starting components of the epoxy resin during their chemical reaction phase (i.e., not fully crosslinked) onto the polyester film substrate is either inherently disclosed, or an obvious nominal coating step to one of ordinary skill in the art of epoxy coating.

For process claim 10, it is the Examiner's position that, in the absence of unexpected results, applying the crosslinked epoxy resin to the substrate after the adhesive coating is an obvious fabrication variation. Further, the Examiner notes that Applicants must show that the recited structure limitations of claim 1 affect the method step in a manipulative sense.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
DEBORAH JONES  
SUPERVISORY PATENT EXAMINER

Victor S Chang  
Examiner  
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